

LPA Series

30 – 700MHz RF Amplifier

Features

- Frequency Range: 30 - 700MHz
- Gain: 30dB
- P_{1dB}: +20dBm
- OIP3: +33dBm
- Noise Figure: 2dB
- DC Power: 5V/100mA
- SMA Female Connector

Picture



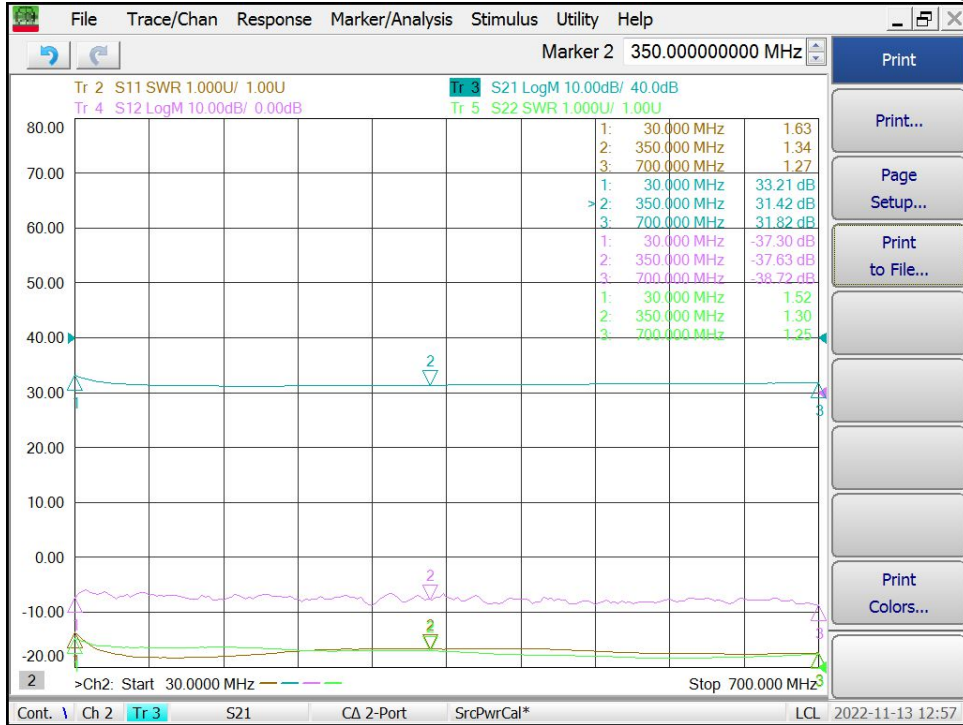
Description

LPA-07-30 is a single 5V 30dB Gain RF Amplifier operates in frequency range from 30MHz to 700MHz.

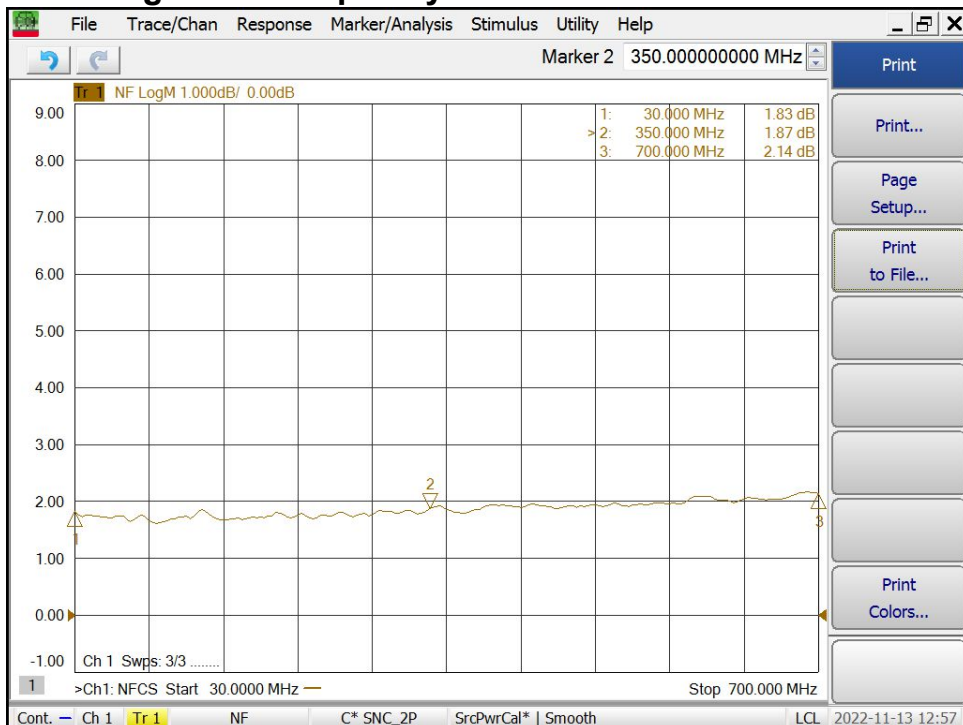
Electrical Specifications @ +25 °C, Z_{in} = Z_{out} = 50 Ω, DC Voltage = +5V

Parameter	Unit	Minimum	Typical	Maximum
Frequency Range	MHz	30		700
Gain S21 f = 30MHz	dB	30.0	33.0	
f = 350MHz	dB	30.0	31.5	
f = 700MHz	dB	30.0	31.5	
Gain Flatness	dB		±1.0	±1.5
P _{1dB} f = 350MHz	dBm	+18	+20	
OIP3 f = 350MHz	dBm	+31	+33	
Noise Figure f = 350MHz	dB		2.0	3.0
Reverse Isolation S12 f = 350MHz	dB	-30	-37	
Input VSWR S11 f = 350MHz			1.3:1	1.8:1
Output VSWR S22 f = 350MHz			1.3:1	1.8:1
DC Power Supply	V	4.5	5.0	5.5
Supply Current	mA		100	120

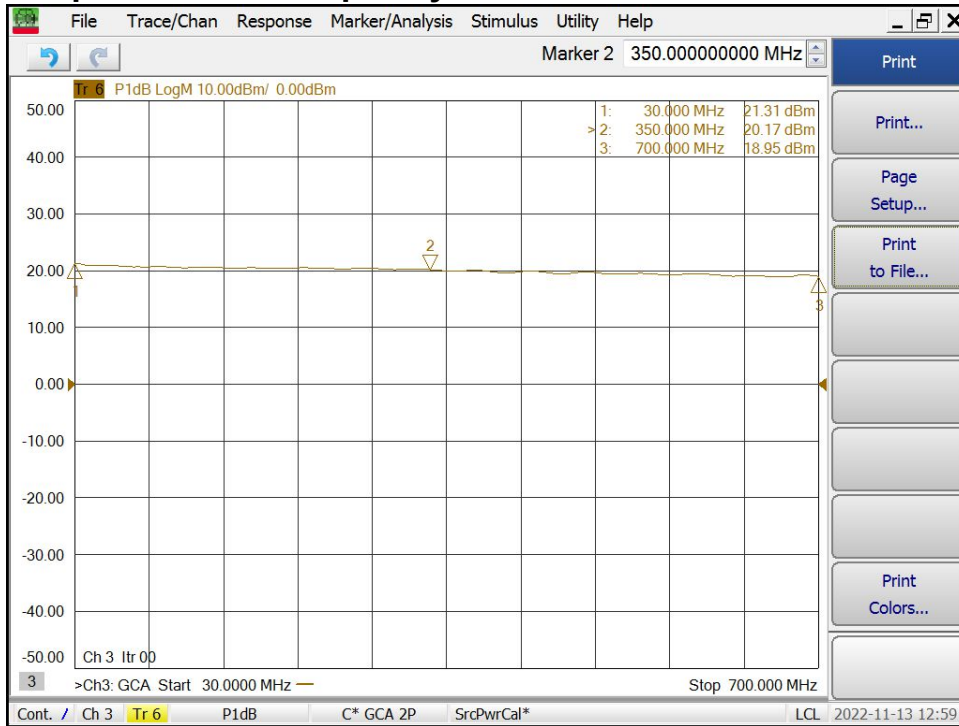
Gain S21, Isolation S12, Return Loss S11, S22 vs Frequency



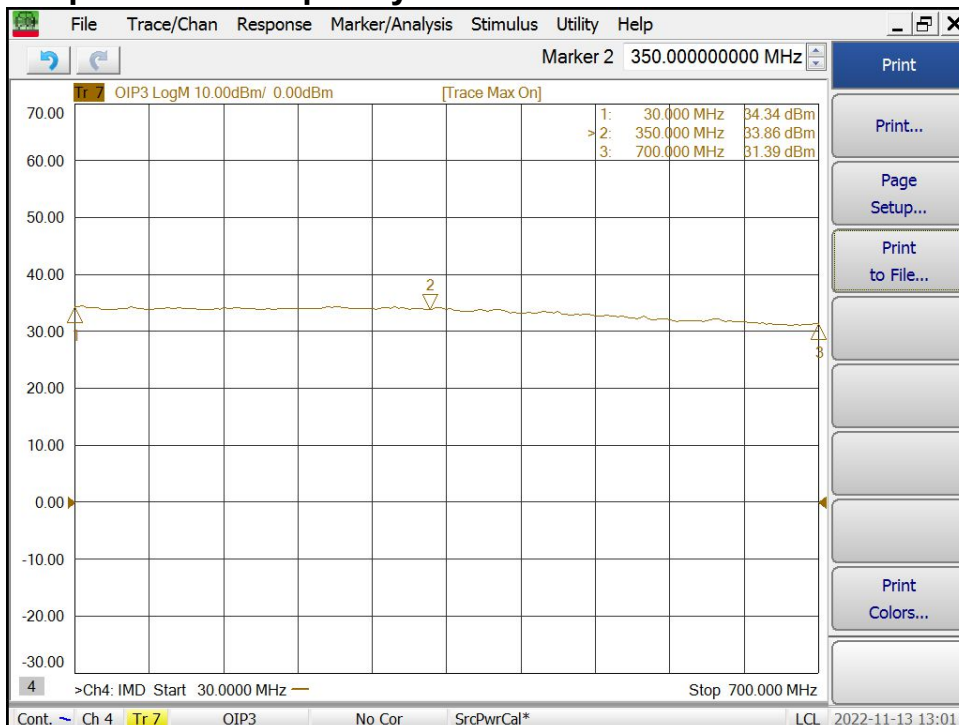
Noise Figure vs Frequency



Output P1dB vs Frequency



Output IP3 vs Frequency



LPA Series

30 – 700MHz RF Amplifier

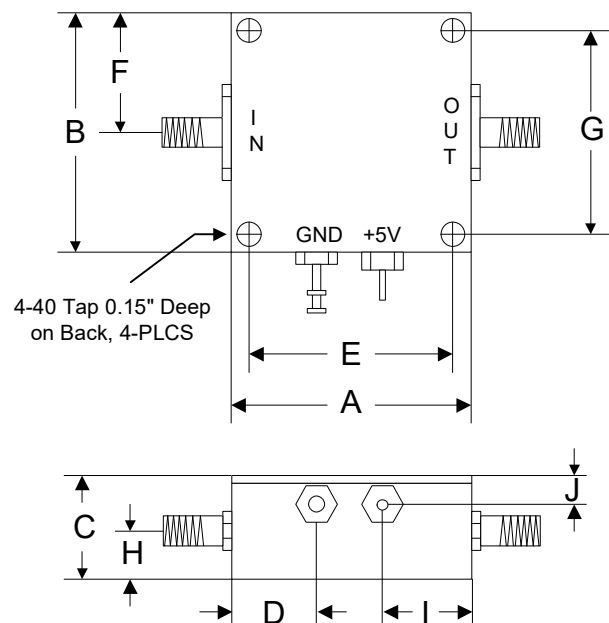
Absolute Maximum Ratings

Parameter	Absolute Maximum
RF Input Power	+15dBm
DC Supply Voltage	+6V
Operating Temperature	-40 °C to +85 °C
Storage Temperature	-55 °C to +125 °C

ESD Sensitive Material



Outline



	A	B	C	D	E	F	G	H	I	J
Inch	1.250	1.250	0.563	0.450	1.000	0.625	1.000	0.250	0.500	0.187
mm	31.75	31.75	14.29	11.43	25.40	15.88	25.40	6.35	12.70	4.76